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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/820,740	04/09/2004	Yu-Yuan Teng	3167-187	8806

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BRUCE H. TROXELL
SUITE 1404
5205 LEESBURG PIKE
FALLS CHURCH, VA 22041

EXAMINER

CARIASO, ALAN B

ART UNIT PAPER NUMBER

2875

DATE MAILED: 10/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/820,740	TENG ET AL.	
	Examiner	Art Unit	
	Alan Cariaso	2875	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-10 is/are rejected.
- 7) ☒ Claim(s) 6 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>Mar232005</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Objections

2. Claims 1 and 7 are objected to because of the following informalities:
3. Claim 1, line 7, the term "born" is incorrect in usage, given the context.
4. Claim 7, line 2, "said lights" is incorrect in referring to most likely the light producing "parallel-arranged lamps" in claim 1. Repeated terms of the same part should be kept consistent.
5. Appropriate correction is required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1, 3-5, 7, 8 and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by HAN et al (US 2004/0114372 A1).

Art Unit: 2875

8. HAN discloses a direct backlight module comprising: a base (bottom chassis 225, figs.6-7) having a plurality of parallel-arranged lamps (221); a supporter plate (frame 224, mess 222f, fig.6) mounted over the base (225) further having a frame (224) and a plurality of wires (222f in fig.8, mesh of plural shielding lines, paragraph 0067) in which the frame (224) is square structure having a central opening (figs.6-7) in which each of the wires (222f) is constructed at the frame (224a in fig.8) and crosses the central opening; and a plurality of films (222a-222e) mounted over and supported by the supporter plate (224,222f); wherein said wires (222f) are parallel arranged (fig.8) and cross arranged (fig.8) over said central opening of said supporter plate (224); wherein materials to form said wires (222f) are metals (paragraph 0067); wherein said films (222a-222e) include a film (222a,222b) to diffuse said lights (paragraphs 0065-0066) and a film (222c,222d) to achieve a haze effect (P 0065 & 0070); and a reflection plate (223) formed on at least one interior surface (fig.7) of said base (225).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 2 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over HAN et al (US 2004/0114372 A1) in view of SKINNER et al (US 6,341,879).

11. HAN discloses the claimed invention except: a cold cathode fluorescent lamp; an interior bottom surface of base coated with a reflection material.

12. SKINNER teaches common use of fluorescent lamps (23) in backlighting LCDs for their high efficiency (col.2). SKINNER further teaches a reflective material (col.5, lines 49-65) coated on the bottom surface of the backlight cavity (22) or back plane (30) for the purpose of best reflecting and diffusing light toward the LCD.

13. It would have been obvious to one having ordinary skill in the art at the time of the invention to provide the backlighting device of HAN et al with the fluorescent lamps and reflective coating as taught by SKINNER et al in order to achieve at least lamp efficiency with luminance uniformity and maximizing light output toward the LCD.

Allowable Subject Matter

14. Claim 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

15. The following is a statement of reasons for the indication of allowable subject matter: None of the prior art of record suggests wires comprising polymers crossing the central opening of the frame of the supporter plate and on which plurality of films are mounted.


Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. PERALTA et al (US 4,150,422) show a wire mesh (22) crossing opening of frame (5 or 23) adjacent optical film (glass sheet 21) (col.3, lines 38-48). OTT (US 3,885,150) shows a housing of plural fluorescent lamps (11) covered by a wire mesh screen (23) comprising woven wires 924,25) adjacent a louver (17). GEORGE (US 3,408,491) shows parallel-arranged wire cords (28) next to lens (20). YOU (US 2004/0105044) shows plural fluorescent lamps adjacent or under a set of wires (17,27a,27b,37a,37b) for absorbing and dissipating heat arranged in parallel and crossed adjacent light scattering optical sheets.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alan Cariaso whose telephone number is (571) 272-2366. The examiner can normally be reached on 9-5:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Alamy Cariaso
Primary Examiner
Art Unit 2875

September 30, 2005
AC